

QY 361 EDDDKLEQIRKDYTGAMLTGELKKALIEVLQPLIAHQARRKEVTDIVKEFMTPRKLS 420
 DB 408 EDDDKLEQIRKDYTGAMLTGELKKALIEVLQPLIAHQARRKEVTDIVKEFMTPRKLS 467
 QY 421 FDFQ 424
 DB 468 FDFQ 471

RESULT 7
 AAB58220
 ID AAB58220 standard; Protein; 475 AA.
 XX
 AC AAB58220;
 DT 14-MAR-2001 (first entry)
 XX
 DE Lung cancer associated polypeptide sequence SEQ ID 558.
 XX
 KW Human; lung cancer associated protein; neuroprotective; cytosolic;
 KW cardioactive; immunomodulatory; muscular active; vulnerary;
 KW gastrointestinal; nephrotropic; antiinfective; gynecological;
 KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;
 KW proliferative disorder; wound healing; infectious disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200055180-A2.
 XX
 PD 21-SEP-2000.
 XX
 PF 08-MAR-2000; 2000WO-US05918.
 XX
 PR 12-MAR-1999; 99US-0124270.
 XX
 PA (HUMA-) HUMAN GENOME SCI INC.
 PA (ROSE/) ROSEN C A.
 XX
 PI Ruben SM;
 XX
 XX WPI; 2000-587514/55.
 DR N-PSDB; AAF18096.
 XX
 XX Lung cancer associated gene sequences, referred to as lung cancer
 PT antigens, useful for treatment, prevention, and diagnosis of disorders
 PT such as lung cancer -
 XX
 PS Claim 11; Page 1052-1053; 1425pp; English.

XX Polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer
 CC associated proteins represented in AAB58106 - AAB58548. Lung cancer
 CC associated proteins and polynucleotide sequences, their agonists, and
 CC antagonists may have neuroprotective; cytosolic; cardioactive;
 CC immunomodulatory; muscular active general; vulnerary; gastrointestinal
 CC general; nephrotropic; antiinfective; gynecological; or antibacterial
 CC activity. The invention also includes antibodies specific for the
 CC protein or polynucleotide sequences. The lung cancer associated
 CC polynucleotide sequences may be used for detection of lung cancer,
 CC chromosome identification, as chromosome markers, and for numerous other
 CC diagnostic or research purposes. The proteins may be used to treat
 CC disorders such as neural, immune, muscular, reproductive,
 CC gastrointestinal, pulmonary, cardiovascular, renal, and proliferative
 CC disorders. The proteins may also be used in the treatment of wounds and
 CC infectious diseases. Polynucleotide sequences AAF18425 - AAF18433 and
 CC peptide AAB58549 are used in the course of the invention for the
 CC identification and characterisation of the polynucleotide and protein
 CC sequences.
 XX
 SQ Sequence 475 AA;

Query Match 99.3%; Score 2231; DB 21; Length 475;
 Best Local Similarity 99.5%; Pred. No. 2.7e-220;

Matches 422; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 MSYKAAAGEDYKADCPGCPNAPTSNHGPDATAEAEEDFVDPMTVQTSSAKGIDYDKLIVRF 60
 DB 52 MSYKAAAGEDYKADCPGCPNAPTSNHGPDATAEAEEDFVDPMTVQTSSAKGIDYDKLIVRF 111
 QY 61 GSSKIDKELINRIERATQORPHHFLRRCIFESHDRMNQVLDAYENKKPFYLYTGRGPSS 120
 DB 112 GSSKIDKELINRIERATQORPHHFLRRCIFESHDRMNQVLDAYENKKPFYLYTGRGPSS 171
 QY 121 AMHVGHLLIPFTKWLQDVFNVLVIQMTDDEKYLWKDLTLDOAYGDAVENAKDIIACGF 180
 DB 172 AMHVGHLLIPFTKWLQDVFNVLVIQMTDDEKYLWKDLTLDOAYGDAVENAKDIIACGF 231
 QY 181 DINKTFIFESDLDYMGSSGFYKVVVKIQKHVTFNQVKGIFGFTSDCTGKISFPAIAQAP 240
 DB 232 DINKTFIFESDLDYMGSSGFYKVVVKIQKHVTFNQVKGIFGFTSDCTGKISFPAIAQAP 291
 QY 241 SFSNSFPOIFRDRDTIOCLIPCAIDODPYFRMTDVPAPRIGYKPKALLHSTFFPALQGAQ 300
 DB 292 SFSNSFPOIFRDRDTIOCLIPCAIDODPYFRMTDVPAPRIGYKPKALLHSTFFPALQGAQ 351
 QY 301 TMSASDPNSSIFLTDTAKQIKTKVNHAFSGGRDTIEHRQFGGNCVDVYSFMYLTFFL 360
 DB 352 TMSASDPNSSIFLTDTAKQIKTKVNHAFSGGRDTIEHRQFGGNCVDVYSFMYLTFFL 411
 QY 361 EDDDKLEQIRKDYTGAMLTGELKKALIEVLQPLIAHQARRKEVTDIVKEFMTPRKLS 420
 DB 412 EDDDKLEQIRKDYTGAMLTGELKKALIEVLQPLIAHQARRKEVTDIVKEFMTPRKLS 471
 QY 421 FDFQ 424
 DB 472 FDFQ 475

RESULT 8
 AAY05372
 ID AAY05372 standard; Protein; 471 AA.
 XX
 AC AAY05372;
 XX
 DT 30-JUN-1999 (first entry)
 XX
 DE Human HCMV inducible gene protein, SEQ ID NO 12.
 XX
 KW HCMV inducible gene; cig; human; human cytomegalovirus; interferon;
 KW anti-viral therapy; anti-HCMV therapy; detection; diagnosis;
 KW drug screening.
 XX
 OS Homo sapiens.
 XX
 PN WO9913075-A2.
 XX
 PD 18-MAR-1999.
 XX
 PF 08-SEP-1998; 98WO-US18638.
 XX
 PR 22-SEP-1997; 97US-0059725.
 PR 08-SEP-1997; 97US-0058180.
 XX
 PA (UYPR-) UNIV PRINCETON.
 XX
 PI Cong J, Schenk T, Zhu H;
 XX
 DR WPI; 1999-243729/20.
 DR N-PSDB; AAX33942.
 XX
 PT New isolated human genes
 XX
 XX Claim 3; Page 112-114; 184pp; English.

This sequence is encoded by a human gene of the invention, and is induced
 to express by both HCMV and interferon (IFN), designated HCMV-inducible

CC genes (cig or cigs). The invention also relates to genes that are
 CC repressed in the presence of HCMV infection, designated HCMV-repressible
 CC genes (cig or cigs). The products can be used to obtain agents which can
 CC be used for anti-viral therapy, particularly anti-HCMV therapy. They can
 CC also be used for the development of drugs that would allow for higher
 CC dosage IFN treatments without the concomitant toxicity normally
 CC associated with administering high levels of IFN. The products can also
 CC be used for detection, diagnosis and drug screening.

XX Sequence 471 AA;
 Query Match 99.1%; Score 2226; DB 20; Length 471;
 Best Local Similarity 99.3%; Pred. No. 8.8e-220;
 Matches 421; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1 MSYKAAAGEDYKADCPGCPNAPTSNHGPDATAEEDFVDPMTVQTSSAKGIDYDKLIVRF 60
 DB 48 MSYKAAAGEDYKADCPGCPNAPTSNHGPDATAEEDFVDPMTVQTSSAKGIDYDKLIVRF 107
 QY 61 GSSKIDKELINRIERATQORPHFLRRGIFFSHRDMNQVLDAYENKPPFYLYTGRGPSSE 120
 DB 108 GSSKIDKELINRIERATQORPHFLRRGIFFSHRDMNQVLDAYENKPPFYLYTGRGPSSE 167
 QY 121 AMHVGHLPFTFKWLQDFVNVPLVIQMTDDEKYLKDLTLDQAYGDAVENAKDIIACGF 180
 DB 168 AMHVGHLPFTFKWLQDFVNVPLVIQMTDDEKYLKDLTLDQAYGDAVENAKDIIACGF 227
 QY 181 DINKTFIFSDLDYMGSGGFYKVVVKIQKHVTFNOVKIGFQFTSDDCIGKISFPFAIOAAP 240
 DB 228 DINKTFIFSDLDYMGSGGFYKVVVKIQKHVTFNOVKIGFQFTSDDCIGKISFPFAIOAAP 287
 QY 241 SFSNSFPQIFDRDITDIOCLIPCAIDQDPYFMTDRDVPRIQYKPKALLHSTFPPALOGAQ 300
 DB 288 SFSNSFPQIFDRDITDIOCLIPCAIDQDPYFMTDRDVPRIQYKPKALLHSTFPPALOGAQ 347
 QY 301 TKMSASDPNSSIFLTDIAKQIKTKVKNHAFSGGRDTIEHRQFGNCNDVVSFMYLTFFL 360
 DB 348 TKMSASDPNSSIFLTDIAKQIKTKVKNHAFSGGRDTIEHRQFGNCNDVVSFMYLTFFL 407
 QY 361 EDDKLEQIRKDYTSGLMTGELAKKALIEVLQPLIAHQARRKEVTDEIVKEFMTPRKLS 420
 DB 408 EDDKLEQIRKDYTSGLMTGELAKKALIEVLQPLIAHQARRKEVTDEIVKEFMTPRKLS 467
 QY 421 FDFQ 424
 DB 468 FDFQ 471

RESULT 9
 AAG79549
 ID AAG79549 standard; Protein; 401 AA.
 AC AAG79549;
 AC AAG79549;
 DT 10-DEC-2002 (first entry)
 XX TrpRS T1 polypeptide.

XX T2; tryptophanyl-tRNA synthase; TrpRS; ocular neovascularisation;
 KW neovascular eye disease; age-related macular degeneration;
 KW ocular complication; diabetes; rubecotic glaucoma; retinopathy;
 KW prematurity; keratitis; ischaemic retinopathy; sickle cell;
 KW pathological myopia; ocular histoplasmosis; pterygia; TI;
 KW punitate innerchoroidopathy; retinal degeneration; growth factor;
 KW vascularisation; vascular endothelial cell function; angiogenesis.

OS Homo sapiens.
 XX WO200267970-A1.
 XX 06-SEP-2002.
 XX 22-FEB-2002; 2002WO-US05185.

XX 23-FEB-2001; 2001US-270951P.
 PR (SCRI) SCRIPPS RES INST.
 PA Schimmel P, Wakasugi K, Friedlander M;
 XX WPI; 2002-698635/75.
 XX New polypeptides derived from human tryptophanyl-tRNA synthase, useful
 PT for inhibiting ocular neovascularization in a patient, or for treating
 PT neovascular eye diseases, e.g. rubecotic glaucoma, retinopathy,
 PT keratitis, or pterygia -
 XX Example 1; Page 78-79; 83pp; English.
 PS This sequence represents a novel cleavage product, T1, of
 CC recombinant human tryptophanyl-tRNA synthase (TrpRS). A related
 CC cleavage product, T2, is water soluble and comprises residues 94-471
 CC of full length TrpRS. The water-soluble T2 polypeptide is useful for
 CC inhibiting ocular neovascularisation in a patient. The T2 polypeptide
 CC is useful for treating neovascular eye diseases, e.g. age-related macular
 CC degeneration, ocular complications of diabetes, rubecotic glaucoma,
 CC retinopathy, pterygia, keratitis, ischaemic retinopathy (e.g.
 CC sickle cell), pathological myopia, ocular histoplasmosis, pterygia, or
 CC punitate innerchoroidopathy. This polypeptide is particularly useful
 CC for treating retinal degeneration to prevent the damaging effects of
 CC trophic and growth factors, and for promoting vascularisation to retard
 CC retinal degeneration by enhancing blood flow to cells. These are also
 CC useful for regulating vascular endothelial cell function, and in
 CC particular, for inhibiting angiogenesis.
 XX Sequence 401 AA;
 SQ Query Match 94.2%; Score 2116; DB 23; Length 401;
 Best Local Similarity 100.0%; Pred. No. 1.4e-208;
 Matches 401; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 24 SNHGPDATAEEDFVDPMTVQTSSAKGIDYDKLIVRFSSSKIDKELINRIERATQORPH 83
 DB 1 SNHGPDATAEEDFVDPMTVQTSSAKGIDYDKLIVRFSSSKIDKELINRIERATQORPH 60
 QY 84 FLRRGIFFSHRDMNQVLDAYENKPPFYLYTGRGPSSEAMHVGHLPFTFKWLQDFVNV 143
 DB 61 FLRRGIFFSHRDMNQVLDAYENKPPFYLYTGRGPSSEAMHVGHLPFTFKWLQDFVNV 120
 QY 144 LVIQMTDDEKYLKDLTLDQAYGDAVENAKDIIACGFINDKTFIFSDLDYMGSGGFYKN 203
 DB 121 LVIQMTDDEKYLKDLTLDQAYGDAVENAKDIIACGFINDKTFIFSDLDYMGSGGFYKN 180
 QY 204 VVKIQKHVTFNOVKIGFQFTSDDCIGKISFPFAIOAPSFNSFPQIFRDRDITDIOCLIPCA 263
 DB 181 VVKIQKHVTFNOVKIGFQFTSDDCIGKISFPFAIOAPSFNSFPQIFRDRDITDIOCLIPCA 240
 QY 264 IDQDPYFMTDRDVPRIQYKPKALLHSTFPPALOGAOTKMSASDPNSSIFLTDIAKQIKT 323
 DB 241 IDQDPYFMTDRDVPRIQYKPKALLHSTFPPALOGAOTKMSASDPNSSIFLTDIAKQIKT 300
 QY 324 KVNKHAFFSGGRDTIEHRQFGNCNDVVSFMYLTFLEDDDKLEQIRKDYTSGLMTGEL 383
 DB 301 KVNKHAFFSGGRDTIEHRQFGNCNDVVSFMYLTFLEDDDKLEQIRKDYTSGLMTGEL 360
 QY 384 KALIEVLQPLIAHQARRKEVTDEIVKEFMTPRKLSFDFQ 424
 DB 361 KALIEVLQPLIAHQARRKEVTDEIVKEFMTPRKLSFDFQ 401

RESULT 10
 AAB47617
 ID AAB47617 standard; Protein; 415 AA.
 AC AAB47617;
 AC AAB47617;
 XX